

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	
Numbering Resource Optimization)	CC Docket No. 99-200
)	
Connecticut Department of Public Utility Control)	RM No. 9258
Petition for Rulemaking to Amend the)	
Commission's Rule Prohibiting Technology-)	
Specific or Service-Specific Area Code Overlays)	
)	
Massachusetts Department of Telecommunications)	NSD File No. L-99-17
and Energy Petition for Waiver to Implement a)	
Technology-Specific Overlay in the 508, 617, 781,)	
and 978 Area Codes)	
)	
California Public Utilities Commission and the)	NSD File No. 99-36
People of the State of California Petition for)	
Waiver to Implement a Technology-Specific or)	
Service-Specific Area Code)	
)	
North American Numbering Council)	NSD File No. 99-51
Recommendation Concerning Replacement of)	
Central Office Code Utilization Survey)	

COMMENTS OF SBC COMMUNICATIONS INC.

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July 30, 1999

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SUMMARY

As an incumbent provider of wireline local exchange and wireless services and a wireline new entrant seeking to enter 30 major metropolitan areas as a competitive local exchange carrier, SBC Communications Inc. ("SBC") is acutely aware of the magnitude of the burden that consumers, state commissions, and carriers have borne by rapid exhaust of area codes and the pressing need to find effective methods to slow the pace of area code relief. Consumers have had to deal with the disruptions and societal costs caused by number changes and dialing pattern changes; state commissions have had to deal with the difficult and often thankless task of balancing diverse consumer interests against the competitive market's need for resources; the industry has had to incur the costs to introduce new area codes and, in some areas, has had to cope with severely restricted supplies of numbers needed to compete in the local markets.

SBC and its customers have incurred their share of the cost and inconvenience caused by the rapid pace of area code exhaust and relief efforts during the past few years. SBC recognizes that area codes cannot be allowed to continue exhausting at the current rate, particularly under existing policies governing area code relief and ten-digit dialing. Seeking to find a cost-effective solution and to minimize the costs and inconvenience to consumers and society, SBC has been an active participant in federal and state efforts to examine alternatives to increase numbering resource optimization, and it has proactively implemented measures in several areas where it provides services to assist in forestalling the need for area code relief.

SBC thus strongly supports the Commission's ongoing investigation into number resource optimization policies, and the Commission's proposal to adopt a package of cost-

effective measures designed to minimize the societal cost caused by the current high demand for numbering resources. SBC applauds the Commission for its detailed and careful examination of a wide range of potential policies in its Notice of Proposed Rulemaking (“NPRM”), and its recognition that numbering resource optimization is a complex issue that requires a careful and detailed examination of the underlying causes of the current high demand for numbering resources in certain areas.

To minimize the harm to customers and society caused by rapid area code exhaust, the Commission’s policies must address the primary driver of the tremendous spike in demand for numbering resources and the rapid introduction of new area codes: the demand by new entrants, primarily new entrants in local wireline markets, for the central office (“CO” or “NXX”) codes needed to establish or expand service territories. Rapid entry of wireline local carriers is occurring primarily in major metropolitan areas, and the Commission’s most stringent policies should be implemented in these areas. The Commission cannot effectively slow the pace of area code relief in any significant manner unless it adopts policies that are designed to address this primary cause of area code exhaust.

At the same time, the Commission must ensure that its policies are cost effective, non-discriminatory, and provide all carriers access to adequate supplies of numbering resources. In order for a solution to be considered cost-effective, it should target the root cause(s) of rapid area code exhaust and not impose costs for changes that would not result in a significant improvement in number resource utilization. In addition, a cost-effective solution should be revenue neutral and not disparately affect carriers’ returns. With these principles in mind, SBC proposes a four-part numbering optimization proposal.

First, the Commission should use a modified version of its “carrier choice” paradigm as the central component of its number optimization policies. The most cost-effective, uniform, workable, and competitively neutral means to achieve these goals is through a utilization “threshold” that applies equally to all carriers. This utilization threshold would be used in major metropolitan areas for dual purposes: (1) to determine which carriers would be required to implement thousands block number pooling (based on the carrier’s NPA-wide utilization); and (2) to verify carriers’ need for allocation of additional numbering resources (based on the carrier’s utilization at the “Lowest Code Assignment Point,” or “LCAP”). SBC proposes that this utilization threshold be phased over three years. In the first year, the threshold would be set at 55 percent, and it would increase five percent a year up to 70 percent at the end of the three-year period. At the end of the three-year period, carriers would be expected to meet this threshold to secure additional numbers at each LCAP. However, to avoid denying carriers needed numbering resources and to avoid unfairly penalizing carriers who, for legitimate reasons, cannot meet the threshold after the end of the phase-in period, certain specific, limited exceptions should be permitted.

Second, SBC strongly supports the Commission’s proposals to improve and strengthen numbering administration. Carriers should be required to prove that they need new resources as a precondition to receiving new resources. Carriers must not be denied the numbers that they legitimately need to compete, but they should not be assigned resources that are not needed promptly, and they should be required to begin using resources promptly after assignment. NANPA, working with state commissions, should ensure that carriers only receive resources in areas where they are authorized to provide service. To ensure that codes are actually

placed “in service” and not just “activated” in the LERG, carriers should be required to provide NANPA with required interconnection information – interconnection facilities, test numbers and the like – when they request initial codes. For growth codes, carriers should be required to establish that they need additional numbering resources in the area where they request them – initially through a hybrid “Months To Exhaust”/Utilization methodology, and, later, by proving that they meet the utilization threshold (with limited exceptions permitted in specific circumstances). Carriers also should be required to certify that NXX codes are actually “in service” within six months of assignment.

Enforcement of these administrative standards are critical – in fact, many of the existing issues with carriers receiving initial codes in areas where they are not authorized to provide service and carriers failing to properly place codes “in service” could be addressed today by more effective enforcement. To that end, all carriers should be required to provide forecasts of numbering resource demand, and all carriers should be required to provide utilization data in compliance with definitions of numbering usage categories developed by the industry. Unused resources should be reclaimed immediately, with state commissions working with NANPA to accomplish reclamation. Forecasts and utilization should be required every six months for the major metropolitan areas (where demand is greatest) and annually in rural areas. The Commission and state commissions should be given carrier-specific reports of forecasts and utilization where confidentiality can be protected. A comprehensive audit and enforcement program, with authority balanced between the Commission, state commissions, NANPA, and auditors, should be instituted to ensure that carriers provide accurate information and are not wasting numbering resources.

Even cost-effective solutions would not be inexpensive for the industry, and it is important that the Commission provide carriers with a means to recover their costs. Shared costs, such as increased NANPA costs and auditing program costs, should be apportioned and paid by carriers through the existing system to recover numbering administration costs. Carrier-specific costs should be recovered through the mechanism developed to recover TBNP implementation costs.

Third, thousands block number pooling with mandatory efficient data representation ("TBNP") should be required in specific areas in the largest 100 MSAs, but only for carriers who fail to the Commission's utilization threshold, and only if the Commission adopts a cost recovery mechanism that permits carriers to fully recover the costs associated with TBNP. Carriers who meet the utilization threshold and carriers who are not required to implement LNP under the Commission's LNP decisions should not be required to participate. Pooling should be required only in the largest 100 MSAs, where the demand for numbering resources is highest, and should only be required in those rate centers/switches within the largest 100 MSAs where porting already exists and the appropriate state commission finds that the benefits of pooling would exceed the costs. In addition, the Commission should require that all LNP-capable carriers deploy mandatory Efficient Data Representation throughout their networks as part of TBNP implementation, to ensure that capacity and throughput limitations do not threaten to undermine existing porting or pooling capabilities. This limited, focused, and targeted application of TBNP would ensure the maximum benefit from pooling at the least societal cost.

TBNP would be extremely expensive to implement for many carriers, and the Commission must provide a meaningful and effective cost recovery mechanism for carriers with price cap requirements. SBC proposes that the Commission extend the existing LNP end user surcharge for a sufficient period of time to recover TBNP costs. While the standards for cost recovery contained in the NPRM are generally appropriate, the Commission should not limit cost recovery by later imposing additional standards for inclusion of costs that may be recovered (as it did in adding the “but for” and “directly in the provisioning of” standards for recovery of LNP costs). Instead, the Commission should provide carriers with full recovery of TBNP implementation costs.

Fourth, the Commission should modify its existing area code relief policies to ensure that area codes are assigned in the most efficient and least disruptive manner possible. To assist state commissions in making efficient area code relief decisions (thereby delaying future area code exhaust), and to minimize societal costs when relief must be performed, the Commission should establish a presumption in favor of using area code overlays to relieve exhausting area codes in the largest 100 MSAs, coupled with a requirement to use an area code overlay where either the existing or new area code would otherwise fail to meet industry standards for length of relief. The Commission also should eliminate the mandatory ten-digit dialing requirement for overlay area codes, or, at a minimum, it should provide blanket waivers of the requirement for rural areas served by overlay area codes. The Commission should not allow technology- or service-specific overlays, as they would require separate, dedicated area codes and would likely decrease, not increase, efficient use of area codes.

The Commission should not adopt policies that would provide little marginal benefit, impose unnecessarily high costs, or threaten the integrity of the LNP and TBNP infrastructure. Thus, SBC supports the Commission's tentative conclusion that individual telephone number pooling ("ITN") should not be implemented at this time, as it provides very little benefit at very high cost. Similarly, unassigned number porting ("UNP") should not be permitted, even on a voluntary basis, because it could exhaust the system capacity that is necessary and essential for the effective operation of porting and pooling. Moreover, ITN and UNP could make individual telephone numbers commodities, and thereby could *exacerbate* demand for numbering resources, as ITN has with toll free services in the 800, 888, and 877 NPAs. Finally, the Commission should reject the proposed "pricing strategy," which would involve charges for telephone numbers at some unspecified time in the future. Pricing very likely would not provide much marginal benefit (if any) beyond the other policies under consideration in this docket, and prices for telephone numbers would impose substantial additional costs on society.

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COMMENTS OF SBC COMMUNICATIONS INC.

I. INTRODUCTION

SBC Communications Inc. ("SBC") commends the Commission for its detailed, comprehensive, and carefully thought out Notice of Proposed Rulemaking ("NPRM") on numbering resource optimization and related issues.¹ The NPRM provides a giant step toward establishing a comprehensive set of policies that will slow the rapid pace of area code exhaust

¹ Numbering Resource Optimization, *Notice of Proposed Rulemaking*, CC Docket No. 99-102 (released June 2, 1999) [hereinafter *NPRM*].

throughout the nation, and it provides a means to address many of the shortcomings in the report of the North American Numbering Council regarding numbering resource optimization (“NANC NRO Report”).² In particular, the NPRM’s review of existing Commission policies concerning area code relief and ten-digit dialing, its focus on “inject[ing] a greater degree of discipline” into numbering resource administration,³ and its recognition of the need to consider the relative costs and benefits of numbering optimization proposals and to provide for carriers’ recovery of the costs of implementing numbering resource optimization techniques, are welcome and important developments since the Commission held briefing on the NANC NRO Report.

The rigorous attention to detail and extensive list of inquiries presented in the NPRM demonstrates that the Commission has thoroughly investigated numbering issues and carefully considered the available alternatives. SBC appreciates the Commission’s dedication to this serious issue, which raises some of the most important decisions concerning numbering resource administration and usage in the history of the North American Numbering Plan (“NANP”). In these comments, SBC responds to as many of the detailed questions posed by the Commission with as much information as possible given time, resource, and space limitations.

SBC supports many of the solutions proposed by the Commission in the NPRM, including (1) the adoption of a “carrier choice” regulatory framework, (2) the development and implementation of enhanced standards governing assignment and use of numbering resources, to ensure that carriers receive and retain only the numbering resources that they actually need, (3) implementation of thousands block number pooling with mandatory efficient data

² See The North American Numbering Council Report Concerning Telephone Number Pooling and Other Optimization Measures, *Comments of SBC Communications Inc.*, at 2-10, NSD File No. L-98-134 (filed Dec. 21, 1998) [*SBC NRO Report Comments*].

representation (“TBNP”) in the largest 100 MSAs by LNP-capable carriers who do not meet a prescribed utilization threshold, (4) revision of area code relief policies to ensure more efficient use of area codes and to minimize societal costs of area code relief. SBC also supports the Commission encouraging state commissions to consolidate rate centers where consolidation would not effect rates for local service and the benefits of consolidation otherwise exceed the costs. SBC discusses these proposals in Sections III-VII below, and offers suggestions for how best to implement each proposal to provide the greatest benefit to consumers, state commissions, the Commission, and carriers in the most cost-effective manner.

SBC discusses why the Commission should not adopt the few remaining alternatives discussed in the NPRM. In Section VIII, SBC explains why the proposed “pricing strategy” would very likely not provide significant benefits over the other proposals suggested in this proceeding, and would impose unnecessary costs for consumers. In Section V.E.2, SBC explains why the Commission should prohibit unassigned number porting (“UNP”), even on a voluntary basis between carriers, because even if this option provided any number optimization benefits at all (which is at best questionable), it would consume a huge amount of the signaling capacity that would need to be dedicated to number porting and thousands-block number pooling could potentially impair or undermine the efficacy of number porting and pooling. Also in Section VII.E.1, SBC explains why the Commission should not seek to transition to individual telephone number pooling (“ITN”), which likely would provide little marginal benefit above thousands-block pooling and which would be extremely expensive to implement, and could

³ See *NPRM* at ¶ 37.

increase the demand for numbering resources (as it has for toll free services in the 800, 888, and 877 NPAs).

Before reviewing these specific proposals, in Section II, SBC examines the goals and objectives that the Commission seeks to accomplish in this proceeding and the underlying causes of the current problem. It is to this discussion that these comments now turn.

II. THE COMMISSION SHOULD ADOPT COMPETITIVELY-NEUTRAL AND COST-EFFECTIVE POLICIES THAT SLOW AREA CODE EXHAUST

The NPRM identifies two primary goals for this proceeding. First, the NPRM states that the Commission seeks to “to address the underlying drivers of area code exhaust so that consumers are spared the enormous costs and inconveniences associated with the rapid pace of implementation of new area codes.”⁴ Second, the NPRM states that the Commission seeks to “prolong the life of the NANP,”⁵ because the Commission is concerned that the rapid pace at which area codes are being introduced might lead to premature exhaust of the NANP. The NPRM also sets forth six objectives for numbering optimization policies. These objectives are to: “(1) minimize the negative impact on consumers; (2) ensure sufficient access to numbering resources for all carriers that need them to enter into or to compete in telecommunications markets; (3) avoid, or at least delay, exhaust of the NANP and the need to expand the NANP; (4) impose the least societal cost possible, in a competitively neutral manner, while obtaining the highest benefit; (5) ensure that no class of carrier or consumer is unduly favored or disfavored by

⁴ *NPRM* at ¶ 5. The Commission restates this goal as “slow the rate of number exhaust in this country as evidenced by the ever-increasing rate at which new area codes are assigned.” *NPRM* at ¶ 1.

⁵ *See NPRM* at ¶ 1.

our optimization efforts; and (6) minimize the incentives for carriers to build and carry excessively large inventories of numbers.”⁶

SBC agrees that slowing the pace of area code relief in a cost-effective manner in order to minimize the cost and inconvenience of area code relief to consumers and society should be a major goal of this proceeding – in fact, it believes that this should be the *primary* goal of this proceeding. However, SBC believes that concerns regarding exhaust of the NANP and the costs to expand the NANP are wholly speculative at this time, and the Commission should not base its policies on such speculation.⁷ SBC strongly supports the six objectives listed of this proceeding listed in the NPRM, with the exception of objective number three concerning NANP exhaust. These points are addressed in turn below.

***A. THE PRIMARY GOAL OF THIS PROCEEDING SHOULD BE TO SLOW
AREA CODE RELIEF IN ORDER TO MINIMIZE COSTS TO CONSUMERS
AND SOCIETY***

SBC wholeheartedly agrees that slowing the pace of area code exhaust in order to minimize costs and inconvenience to consumers and to society should be a major goal of this proceeding – in fact, it believes that this should be the *primary* goal of this proceeding. SBC also agrees that in order to accomplish this goal, it is necessary for the Commission to address the underlying drivers of area code relief, which are addressed below. However, SBC respectfully suggests that *area code relief, per se, is not the problem* – the problem is *the costs and inconvenience to consumers and society* that are created by *rapid and (in some cases) repeated*

⁶ NPRM at ¶ 6.

⁷ This does not mean that the Commission should ignore carrier utilization rates or not be concerned about optimizing utilization of NANP resources – quite the contrary. Under-utilization of resources is a major factor causing the current rapid pace of area code exhaust, and improving carrier utilization rates should be a major objective of this proceeding.

area code exhaust.⁸ Exhausting old area codes and introducing new ones is a necessary and planned part of the NANP, and some consumer and societal cost is inherently a part of this system (as with the construction, renovation, and demolition of the freeways in the national highway system). The problem is not simply the introduction of new area codes, but the relatively high degree of inconvenience and costs that consumers and society have been forced to bear in a short amount of time, which has been caused by the rapid exhaust and introduction of area codes since the passage of the Telecommunications Act of 1996.

While this distinction may at first seem minor, SBC suggests it is not. First, the distinction underscores the fact that the Commission simply cannot eliminate all area code relief. Area code relief will continue to be necessary despite the policies adopted in this proceeding. Second, the distinction focuses on the most important issue in this proceeding – finding cost-effective and efficient means to minimize the *costs and inconvenience to consumers and society* caused by the rapid introduction of new area codes. To address this problem, the Commission's policies should slow the pace of area code relief. In addition, the Commission should change its policies concerning overlay area codes and ten-digit dialing, to maximize the efficient use of area codes and to minimize costs to consumers when area code relief is necessary.⁹

**1. New Entrant Demand for Codes to Establish or Expand Service Area
"Footprint" is the Primary Cause of Rapid Area Code Exhaust**

The NRPM correctly acknowledges that, in order to effectively slow the current introduction of new area codes, the Commission must "address the underlying drivers of area

⁸ See *NPRM* at ¶ 4 ("[t]he effect on consumers of having to undergo, in some cases, multiple area code changes in relatively short time frames is an unacceptable byproduct of burgeoning competition in the telecommunications marketplace.").

⁹ Changes to area code relief and ten-digit dialing policies are discussed in Section VI, *infra*.

code exhaust.”¹⁰ The NPRM suggests as drivers the existing number assignment system, which results in “the allocation of telephone numbers to multiple service providers in large blocks on a geographic basis,” the development and expansion of competition in wireline and wireless services, and customers “obtaining additional telephone lines to support additional services such as Internet, data, and facsimile services,” and the absence of regulatory restraints.¹¹

While these factors, as well as population/economic growth and regulatory policies, all contribute to the demand for numbering resources and thereby to the exhaust for area codes, they do not all contribute equally. The NPRM makes no attempt to quantify which factors are most responsible for creating the increase in demand. Two of these factors combine to create the overwhelming cause of the current problem: the number assignment system, in which carriers receive blocks of 10,000 numbers within individual rate centers, and the rapid entry of a significant number of new carriers, primarily wireline carriers, in local markets as a result of the introduction of local exchange competition.¹²

The rapid pace of area code relief is directly attributable to the development of wireline competition for local exchange service. In the five years proceeding the passage of the Telecommunications Act of 1996, an average of four new area codes were introduced a year.

¹⁰ *NPRM* at ¶ 5.

¹¹ *See NPRM* at ¶¶ 1, 3, 15.

¹² Neither of these factors alone would be sufficient to create the explosive growth for numbering resources. The existing number assignment system, although it is not perfectly efficient, does not cause rapid area code relief by itself – in fact, wireline and wireless carriers have used this system for many years without causing unacceptably high levels of area code exhaust. Nor is this system workable only as long as there is only one carrier providing one type of service, as the NPRM suggests, (*see NPRM* at ¶ 1), for wireless carriers have used the system to provide competitive services efficiently for years. Similarly, although growth in the number of carriers logically would increase demand for numbering resources to some degree, the growth in carriers

That average increased more than *5-fold* between 1996-98, exceeding 22 new area codes annually.¹³ In the State of California, SBC estimates that the number of NXX codes assigned each year also increased more than *5-fold*, from an average of 294 between 1991-95 to an average of 1,538 between 1996-98, despite severe rationing that constrained the number of NXX codes available for assignment in 1997 and 1998. Similarly, SBC estimates that in the five states where Southwestern Bell Telephone Company (“SWBT”) serves as an incumbent local exchange carrier, the number of assigned NXX codes nearly tripled between 1995 and 1997 – from 706 in 1995 to a high of 1,927 in 1997.

The overwhelming majority of this high demand for NXX codes, which gives rise to the demand for new area codes, is created by new entrants seeking to establish service area “footprint,” particularly new entrants in wireline local exchange markets. In order to establish this “footprint” under the existing number assignment system, a wireline new entrant requires a NXX code in each rate center in which it is seeking to offer service, which are “initial” NXX codes.¹⁴

by itself need not create the level of demand for numbering resources seen in the past two years without the existing rate center assignment system.

¹³ Between 1991 and 1995, 24 new area codes were introduced in the United States, an average of just under five new area codes per year. 67 new area codes were introduced in 1996, 1997, and 1998, an average of just over 22 new area codes per year. See Lockheed Martin, NANP Exhaust Study, at 2-5 (April 21, 1999) [hereinafter *Lockheed Martin Study*], attached to Letter from Alan Hasselwander, NANC, to Lawrence Strickling, FCC (May 12, 1999).

¹⁴ As the *NPRM* notes, the first NXX code assigned to a carrier in a rate center is referred to as an “initial” code in industry nomenclature; subsequent NXX codes in the same rate center are referred to as “growth” NXX codes. See *NPRM* at ¶¶ 55-56.

In the California CO code lottery for the month of June, 1999, approximately 82 *percent* of the total NXX code requests were for “initial” NXX codes.¹⁵ CLECs received nearly 70 percent of all NXX codes assigned to the industry for the first five months of this year.¹⁶ Since 1996, SBC estimates that CLECs in California have been assigned more than 3,400 codes – several times more than the total number of codes assigned to the rest of the industry in the state of California between 1990 and 1995, and far more than the rest of the industry combined since 1996. For the first five months of this year, CLECs received 5 *times* more NXX codes than wireless, and *more than ten times* more NXX codes than all ILECs combined.¹⁷ There should be no doubt that requests by new entrants for numbering resources to establish service area footprint is the main cause of the rapid rate of area code exhaust.

This new entrant demand is exacerbated by the existing structure to assign telephone numbers in specific rate center areas in blocks of 10,000 numbers. A substantial portion of these new entrant NXX codes are for service area footprint. It has been SBC’s experience in the states where it provides local exchange service that most CLECs in most areas hold only one NXX code for footprint; for example, in the 816 area code in Missouri (serving Kansas City and surrounding areas), more than 89 percent of the NXX codes assigned to CLECs

¹⁵ See Order Instituting Rulemaking/Investigation on the Commission’s Own Motion Into Competition for Local Exchange Service, *Report of the North American Numbering Plan Administrator on NXX Code Lottery, Status Report 33*, at “Telephone Central Office Code Lottery Applications” Attachment, at 1-5, Docket Nos. R.95-04-043/I.95-04-044 (Cal. P.U.C. filed July 1, 1999) (563 initial NXX code requests and 125 growth NXX code requests).

¹⁶ See NANPA, June 1999 California Monthly Code Assignments Report (showing 317 NXX codes assigned to wireless & paging carriers, 69 to incumbent local exchange carriers, and 869 to “CLCs” between January and June, 1999).

¹⁷ *Id.*

are initial codes.¹⁸ However, some carriers routinely request two NXX codes – an initial NXX code and a growth NXX. A handful of carriers request several growth NXX codes – in a handful of situations, new entrant wireline carriers have more than ten NXXs in a single rate center.¹⁹ When all CLEC codes are aggregated, SBC estimates that approximately 80 percent of new entrant wireline codes are initial codes; 20 percent are growth codes.²⁰ Thus, the high demand for numbering resources for new entrants manifests itself largely (but not entirely) in initial NXX code requests.

Although detailed data is not available concerning nationwide number utilization rates, it is generally accepted that these CLEC “footprint” codes are among the most underutilized resources in the NANP today. In major metropolitan areas, where there are a substantial number of wireline local carriers in the market, LNP has been fully implemented and the numbers in these “footprint” codes will be used primarily for new customers and to provide additional telephone numbers to existing customers. SBC has reason to believe that over 100 such codes, although “activated” in the LERG, are not actually “in service” today in the areas where it serves as the incumbent local exchange carrier. Thus, it is reasonable to conclude that new entrants in wireline markets are actually utilizing a relatively small percentage of the telephone numbers assigned to them.

SBC does not offer this observation in an effort to ascribe blame for the current situation; quite the contrary. SBC is *itself* a new entrant in wireline local markets, and it plans to

¹⁸ Data compiled from the March, 1999, Local Exchange Routing Guide (“LERG”).

¹⁹ It is quite likely that many of the “growth” codes assigned to carriers are unnecessary. If carriers are requesting more codes for “footprint” than necessary, establishing stringent requirements on “growth” code requests is necessary, and should be sufficient, to curb potential excesses.

enter 30 major metropolitan local exchange markets over the next three years. In those areas, SBC will need numbering resources just like most other new entrants in local wireline markets. However, the Commission should realize that the large number and relatively low utilization of these new entrant "footprint" codes creates special issues for national numbering optimization policies.

First, logic dictates that this "footprint" demand is a temporary phenomenon. Establishment of service footprint in a rate center is a one-time event for each carrier. The severity and duration of this "spike" in demand is driven primarily by the number of carriers entering a particular market at a particular time and competitive market conditions. There is a limit to the number of carriers that any individual market can bear, in telephony as in other markets. Accordingly, at some point, the current level of demand for "footprint" codes will subside as a result of competitive market factors.²¹

Once a LNP-capable carrier establishes its "footprint" in an area, it likely will have very low demand for future numbering resources. With LNP, new entrants have access to all telephone numbers assigned or reserved to other carriers' customers, in addition to the telephone numbers assigned to them. As these new entrants win customers, they have access to these customers' telephone numbers, working and reserved. New entrants only need their own

²⁰ Data compiled from the March, 1999, LERG.

²¹ It is unclear at this point how long the current expansion of footprint will continue at its current pace, but it logically must subside at some point. SWBT estimates that in the five states where SWBT is an incumbent local exchange carrier, NXX code demand dropped substantially between 1997 and 1998. In 1997, a record number of NXX codes – 1,972 – were assigned. In 1998, that number fell to 1,415 – a reduction of 557 NXX codes (more than 28 percent) in a single year. While this limited data is insufficient to establish that the "spike" in footprint expansion has reached its peak in these states, SBC suggests that the substantial reduction in a single year

numbering resources to provide service to new customers, or to add additional lines to customers' services. Thus, the high demand caused by "footprint" codes likely is a temporary phenomenon, and it will not be continued or replicated through demand for growth codes.

Second, the most direct and cost-effective way to slow the pace of area code relief is to ensure that this "footprint" demand is satisfied in an efficient manner. Administrative controls can prevent waste of resources by ensuring that carriers do not receive multiple "footprint" resources unless they need them, and it can ensure that resources are put in use promptly.

Finally, although SBC agrees with the Commission's tentative conclusion that it should adopt administrative rules to control the assignment of "growth" codes (such as a utilization threshold), such rules will not address one major source of the current problem – the assignment of initial service "footprint" NXX codes. To the extent that demand for "footprint" codes continue, TBNP can increase efficiency of the use of resources by assigning only 1,000 telephone numbers in an initial block. However, TBNP is a very expensive "solution," and when new entrant "footprint" demand slows down, as logic suggests it must, TBNP would provide only a fraction of the benefits.

2. Rapid Area Code Relief and the High Demand For NXX Codes is Concentrated in Major Metropolitan Areas

The NPRM recognizes that major metropolitan areas of the country "are likely to be subject to the majority of area code relief proceedings."²² Nearly two-thirds of the area codes that will exhaust in the next three years, according to NANPA's 1999 Central Office Code

should give the Commission pause and encourage it to seek more data concerning current NXX code demand before taking any action in this proceeding.

Utilization Survey ("COCUS"), will be in area codes within the largest 100 MSAs.²³ Thus, the highest demand for NXX codes that is causing rapid area code exhaust is occurring predominantly in the largest major metropolitan areas.

Again, this growth characteristic is driven largely by new entrants in local wireline service markets. There are 31 competitive wireline carriers with assigned numbering resources in the Los Angeles MSA, 27 in the San Francisco and San Jose MSAs, and 24 in the Dallas MSA. In contrast, areas outside the largest 100 MSAs have far fewer CLECs and lower NXX demand and area code relief. The 806 area code in West Texas, for example, has only seven competitive wireline carriers with assigned resources; the 580 area code in Western Oklahoma, has only three. Even within the largest 100 MSAs, numbering resource demand often is concentrated in the largest markets; Tulsa, Oklahoma (3) and El Paso, Texas (2), for example, although within the largest 100 MSAs, have a fraction of the number of new entrants in Los Angeles, the San Francisco Bay Area, or Dallas. A more detailed analysis of the stratification in demand, summarizing data from selected area codes in the states where SBC telephone companies provide local exchange service, is shown below:²⁴

MSA	MSA Size	NPA	Number of CLECs Assigned Resources	Total NXX Codes Assigned To CLECs
Los Angeles, CA	1	310	31	160
Dallas, TX	11	214	24	77
St. Louis, MO	16	314	11	71

²² See *NPRM* at ¶ 146.

²³ The 1999 COCUS estimates 118 area codes will exhaust by the end of 2003. 75 of these area codes are within the largest 100 MSAs. Of course, area code and MSA boundaries are not coincident, and in many instances an area code will fall partly within and partly without one of the largest 100 MSAs. Throughout these comments, the "area codes within the largest 100 MSAs" means area codes in whole or in part within the boundaries of the largest 100 MSAs.

²⁴ Data compiled from the July, 1999, LERG.

Kansas City KS	28	913	10	50
San Francisco, CA	29	415	27	147
San Jose, CA	31	408	27	120
Tulsa, OK	70	918	3	10
El Paso, TX	74	915	2	6
West Texas	Outside Top 100 MSAs	806	7	12
Stockton, CA	Outside Top 100 MSAs	209	10	70
East Texas	Outside Top 100 MSAs	409	6	44
SE Missouri	Outside Top 100 MSAs	417	5	8
W. Oklahoma	Outside Top 100 MSAs	580	3	6

It is unlikely that new entrants will seek to enter rural areas in the immediate future, for many reasons. First, the vast majority of access lines are contained in the largest 100 MSAs; approximately 88 percent of Pacific Bell's access lines are within the largest 100 MSAs. Second, large businesses are concentrated in the largest metropolitan areas. Third, the largest metropolitan areas are also the major population centers. Fourth, the cost to serve sparsely-populated rural areas is substantially higher per line than the cost to serve densely-populated urban areas.

Again, this data has important implications for the Commission's numbering optimization policies. To accomplish its objective to impose the "least societal cost possible, in a competitively neutral manner, while obtaining the highest benefit,"²⁵ the more extensive and expensive numbering optimization techniques should be implemented only in the largest metropolitan markets and focused on carriers with low utilization.

²⁵ See *NPRM* at ¶ 6.